

Serial No.: 10/083,877

Attorney's Docket No.:10559/591001/P12772

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 - 41 (cancelled)

42. (previously presented): A method of measuring comprising:

providing an optical metrology target in a first layer of a device, the optical metrology target comprising:

a first periodic structure comprising at least two features, the first periodic structure having a first pitch; and

a second periodic structure comprising at least two features, the second periodic structure having a second pitch that differs from the first pitch;

providing a second optical metrology target in a second layer of the device, the second optical metrology target comprising:

a third periodic structure comprising at least two features, the third periodic structure having a third pitch; and

a fourth periodic structure comprising at least two features, the fourth periodic structure having a fourth pitch that differs from the third pitch;

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illuminating the optical metrology target with a light source;

receiving an optical signal from the optical metrology target; and

analyzing the optical signal.

43. (original): The method of claim 42 in which analyzing the optical signal comprises determining the offset between the optical metrology target in the first layer of the device and the second optical metrology target in the second layer of the device.

44. (original): The method of claim 43 in which:
the third pitch of the second optical metrology target in the second layer of the device is equal to the first pitch of the optical metrology target in the first layer of the device; and

the fourth pitch of the second optical metrology target in the second layer of the device is equal to the second pitch of the optical metrology target in the first layer of the device.

45 - 47 (cancelled)

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48 - 80 (cancelled)

81. (previously presented): An integrated circuit comprising:

at least one electrical element;

an optical metrology target provided in a first layer of a device, the optical metrology target comprising:

a first periodic structure comprising at least two features, the first periodic structure having a first pitch, and

a second periodic structure comprising at least two features, the second periodic structure having a second pitch that differs from the first pitch; and

a second optical metrology target provided in a second layer of the device, the second optical metrology target comprising:

a third periodic structure comprising at least two features, the third periodic structure having a third pitch, and

a fourth periodic structure comprising at least two features, the fourth periodic structure having a fourth pitch that differs from the third pitch.

82. (cancelled)

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83. (previously presented): The integrated circuit of
claim 81 in which:

the third pitch of the second optical metrology target
in the second layer of the device is equal to the first pitch of
the optical metrology target in the first layer of the device;
and

the fourth pitch of the second optical metrology
target in the second layer of the device is equal to the second
pitch of the optical metrology target in the first layer of the
device.

84-90. (cancelled)